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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,590	12/17/2003	Sheng-Hsiung Lin	3074/132	5803

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/736,590

Applicant(s)

LIN ET AL.

Examiner

Jennifer T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagiwa et al. (Patent No.: US 6,609,418) in view of Hori et al. (US Patent No.: 5,072,209).

Regarding claim 1, Yamagiwa teaches a helmet having detecting tire status capability, comprising:

- a body with an opening (102, fig. 6);
- a face guard connected pivotally to the body to cover the opening (fig. 7);
- a controller (82, fig. 4) in the body linked to at least one tire status detector (71) in at least one wheel wherein the controller receives at least one tire status signal from the at least one tire status detector (col. 7, line 45 to col. 8, line 9).

Yamagiwa differs from claim 1 in that he does not specifically teach “a projector mounted ... supply power”.

Hori teaches a projector (5, figs. 3 and 4) mounted in the body and faced to the opening, wherein the projector is connected to the controller; and

a power circuit (7 and 8) is connected to the controller and the projector to supply power (col. 3, lines 37-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the projector and power circuit as taught by Hori

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in the system of Yamagiwa in order to project data on the helmet without the cord connection between the vehicle and the helmet.

Regarding claim 2, Yamagiwa teaches a microprocessor (not shown) connected to an external memory (ROM); an RF receiver (78) received the tire status signal from the at least one tire status detector (71) and connected to the microprocessor, wherein the RF receiver outputs the tire status signal to the microprocessor; an alarm circuit (84) connected to the microprocessor; and a driver (not shown in display means 83) connected between the microprocessor and the projector (col. 6, lines 3-43).

Regarding claims 3 and 13-15, the combination of Yamagiwa and Hori teaches an enabling switch mounted in the body and connected to the microprocessor to detect whether a rider worn the helmet (col. 4, lines 13-25 of Hori).

Regarding claims 4 and 5, the combination of Yamagiwa and Hori teaches a face guard sensor switch mounted on the opening and connected to the microprocessor to detect whether the face guard covers completely (col. 3, lines 13-24 of Hori).

Regarding claims 6-8, the combination of Yamagiwa and Hori teaches a power detecting unit connected between the microprocessor and the power circuit; wherein the power detecting unit is an analog to digital converter (ADC)/comparator (col. 4, lines 6-13, lines 28-36).

Regarding claim 9, Yamagiwa teaches a receiving tire status signal means and a determining abnormal tire status signal means (col. 6, lines 24-30).

3. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The prior art made of record and not relied upon is considered to pertinent applicant's disclosure: Patent. No. US 6,529,126 and 5,856,811.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen
1/2/07


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600